UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/431,449	11/01/1999	ANTHONY P. GALLUSCIO	6572-14	8736

39207 7590 09/20/2004

SACCO & ASSOCIATES, PA
P.O. BOX 30999
PALM BEACH GARDENS, FL 33420-0999

EXAMINER	
HOANG, PHUONG N	

ART UNIT	PAPER NUMBER
2126	20

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/431,449	Applicant(s) GALLUSCIO ET AL.	
	Examiner Phuong N. Hoang	Art Unit 2126	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 July 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 - 20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 - 20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1 – 20 are pending for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. **Claims 7, and 9 – 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erickson, US patent no, 6,181,707 in view of Peterson, US patent no. 5,504,901.**

4. Erickson and Peterson references can be found in previous office action.

5. **As to claim 7,** Erickson teaches a method for configuring high speed interprocess communications between first and second presses comprising the steps of:

disposing a message buffer in a shared region of random access memory (RAM) shared between the first and second processes (col. 7 lines 4 – 55);

accumulating message data from the first process in a location in the message buffer (col. 7 lines 15 – 20);

adding to the message list of the second process a memory offset corresponding to the location in the message buffer (col. 7 lines 52 – 57);

whereby the accumulated message data is transferred from the first process to the second process with minimal data transfer overhead (col. 7 lines 4 – 55).

Erickson does not teach the step of manipulating in the second process the accumulated data at the location corresponding to the offset, the manipulation modifying the accumulated data in place at the location.

Peterson teaches the step of manipulating in the second process the accumulated data at the location corresponding to the offset, the manipulation modifying the accumulated data in place at the location (procedure to be called or the data to be accessed .... Executed and data access by employing a memory offset pointer, col. 7 lines 42 – 50 and col. 8 lines 62 – 65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Erickson and Peterson's because Peterson's accessing data using memory offset would provide flexibility for the second process to manipulate data and reduce the cost of data processing system.

6. **As to claim 9,** Erickson teaches the step of wherein the message list is a message queue (col. 7 lines 12 – 55).

7. **As to claim 10,** Erickson teaches the steps of wherein the adding means comprises:

means for retrieving a memory offset in the message buffer corresponding to the location of data accumulated by the first process; and, means for inserting the memory offset in the message queue corresponding to the second process (col. 7 lines 12 – 55).

8. **As to claim 11,** Erickson teaches the steps of atomically assigning the memory offset to an integer location in the message queue corresponding to the second process (col. 7 lines 35 – 55).

9. **As to claim 12,** Erickson teaches the steps of means for identifying a memory offset in the message list corresponding to the second process; means for using in the second process message data at a location in the message buffer corresponding to the memory offset; and, means for releasing the message buffer (col.8 lines 1 – 35).

10. Claims 1 – 6, 8, and 13 – 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erickson, US patent no, 6,181,707 in view of Peterson, US patent no. 5,504,901, and further in view of Carter, UD patent no. 6,148,377.

11. Erickson and Carter references can be found in previous office action.

12. **As to claim 13,** Erickson teaches a method for high speed interprocess communications comprising the steps of:

attaching first and second processes to a message buffer in a shared region of random access memory (RAM), each the process having a message list (col. 7 lines 4 – 55);

accumulating message data from the first process in a location in the message buffer (col. 7 lines 15 – 20);

adding to the message list of the second process a memory offset corresponding to the location in the message buffer (col. 7 lines 52 – 57);

Erickson does not teach the step of the RAM is exclusive to the operating system, and manipulating in the second process the accumulated data at the location corresponding to the offset, the manipulation modifying the accumulated data in place at the location.

Peterson teaches the step of manipulating in the second process the accumulated data at the location corresponding to the offset, the manipulation modifying the accumulated data in place at the location (col. 7 lines 42 – 45 and col. 8 lines 62 – 65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Erickson and Peterson's because Peterson's accessing data using memory offset would provide flexibility and efficiency for the second process to manipulate data, and therefore reduce the cost of the data processing system.

Erickson and Peterson do not teach the step of RAM is exclusive of the operating system.

Carter teaches the step of RAM is exclusive to the operating system (fig. 1 and 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Erickson, Peterson and Carter's because Carter's RAM exclusive to the operating system would speed up the transferring and accessing data process when it does not have to access through the operating system.

13. **As to claim 14,** Erickson teaches the steps of means for detecting a previously created shared region of RAM; and, means for creating and configuring a shared region in RAM for storing accumulated data if a previously created shared region of RAM is not detected by the detecting means (col. 7 lines 15 – 30).

14. **As to claims 15 - 18,** see claims 9 - 12 above.

15. **As to claim 1,** it is the method claim of claim 13. See the rejection of claim 13 above. Further, Erickson teaches whereby the accumulated message data is transferred from the first process to the second process with minimal data transfer overhead (col. 7 lines 4 – 55).

16. **As to claims 2 – 6,** see the rejection of claims 14 – 18 above.

17. **As to claim 8,** Erickson teaches the steps of creating a message list in the shared region for each the process, whereby the message list can store memory offsets of message data stored in the message buffer (col. 7 lines 1 – 55). See rejection of claim 13 for RAM exclusive of operating system kernel space.

18. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erickson, US patent no, 6,181,707, in view of Peterson, US patent no. 5,504,901, in view of Carter, UD patent no. 6,148,377, and further in view of Bohannon, US patent no. 5,991,845.

19. **As to claims 19 and 20,** Erickson, Peterson, and Carter do not teach the step of locking the accumulated data to prevent the first process from accessing the accumulated data while the accumulated data is being manipulated.

Bohannon teaches the step of locking the accumulated data to prevent the first process from accessing the accumulated data while the accumulated data is being manipulated (col. 1 lines 46 – 50).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Erickson, Peterson, Carter, and

Bohannon's because Bohannon's locking system would control the exclusively access to the resources in a multi-processing system.

Response to Arguments

20. Applicant's arguments filed on 7/21/04 have been fully considered but they are not persuasive.

21. Applicant argued in substance that

(1). Applicant respectfully disagreed with the cited limitation of data manipulation taught by Peterson.

22. Examiner respectfully disagreed with applicant's remark.

As to point 1, Applicant fails to point out how the limitation is not met. Peterson teaches manipulating in the second process the accumulated data at the location corresponding to the offset, the manipulation modifying the accumulated data in place at the location (procedure to be called or the data to be accessed .... Executed, and data access by employing a memory offset pointer, col. 7 lines 42 – 50 and col. 8 lines 62 – 65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Erickson and Peterson's because Peterson's accessing data using memory offset would provide flexibility for the second process to manipulate data and reduce the cost of data processing system.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong N. Hoang whose telephone number is (703) 605-4239. The examiner can normally be reached on Monday - Friday 9:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703)305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ph
September 13, 2004

MENG-AL T. AN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100